Aggression In Individuals with ASD: Factors to Consider

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Background

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"Almost nothing causes as much distress to parents as their autistic child's aggressive behavior." (Schopler, 1995)

Different prevalence rates exist for the presence of aggressive behaviors in individuals with Autism Spectrum Disorders (ASD). Some of this variability is due to differences in definitions of aggression, and differences in the behaviors included as aggression. Matson & Adams (2014) indicate that aggression may occur in as many as half of all individuals with ASD.

Aggression is closely related to other disruptive behavior disorders, such as: meltdowns, tantrums, and rage incidents, and it shares many similar features. Whereas these others can be extremely concerning, aggression has the additional feature of not only disrupting the family, school, community or work, but also endangering both the individual and those around them.

Aggression, even more than these other disruptive behaviors, can overwhelm the coping mechanisms of the family, staff, and community members. Aggression, when left unchecked, can lead to families and staff members developing a fearful, almost traumatic, association with the individual and his or her behaviors.

"Aggressive behavior usually is not life threatening, but may be the "final straw" that overwhelms the family or causes the autistic person to be ejected from his or her classroom, workshop, or group home." (Schopler, 1995)

The potential impact of this disruptive behavior on both the individual (including, educational, work, relationship, community, residential, and treatment opportunities) and those around the individual make this an important class of behaviors to improve.

Definitions

Aggression: "behavior that (potentially) results in injury or harm in another person or in property destruction without consideration of whether the aggressive behavior is 'deliberately' exhibited or not." (Horovitz, 2015)

Emotion Regulation: "the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions…to accomplish one's goal." (Hirschler-Guttenberg, Feldman, Ostfeld-Etzion, Laor, & Golan, 2015)

Externalizing Behavior: negative behaviors (or energy) that is directed outwards toward the environment.

Internalizing Behavior: behaviors that arise from directing negative energy or problems inwards toward the self.

Irritability: abnormal disposition to uncontrolled anger or aggression (Cortese, 2016)

*** It is important when determining both the function and cause of aggression to differentiate whether the aggression was directed to the self, others, or objects, although it is quite possible that the aggressive act may be directed toward more than one of these.
***It is important to complete a Functional Behavior Assessment and a Diagnostic Assessment to determine factors influencing the expression of the aggression.
Intervening in the earliest steps in the chain of behaviors can interrupt the expression of this behavior.

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(adapted from and Ambler, Eidels, & Gregory, 2015; Cortese, 2016; Fitzpatrick, et al., 2016; Im, 2016; Matson & Adams, 2014; Ory, 2007; Presmanes Hill, et al., 2014; Singh, Lancioni, Winton, & Singh, 2011; Volkmar, Rogers, Paul, & Pelphrey, 2014)

There are a number of different ways to categorize aggressive behaviors.

Focus of the Aggressive Act:

Aggression towards the self (also known as Self-Injurious Behavior). This form of aggression will be reviewed in a separate Behavioral Cheat Sheet.

Aggression towards another person.

Aggression towards objects (also known as 'destruction of property.'

Form of the Aggressive Act:

Verbal Aggression: verbally abusive, yelling or shouting at others, swearing, verbally threatening

Physical Aggression: pushing, pulling hair, kicking, biting, spitting, hitting, grabbing, pulling, scratching, pinching, banging on objects, destroying, threatening gestures, throwing objects, ripping clothes, forcibly taking objects, using weapons (or objects as weapons) against others, choking

Level of Internal Regulation:

Proactive (or instrumental) aggression: a negative response that occurs to achieve a desired and planned goal. This implies a level of internal regulation and planning for goal of aggression to be achieved.

Reactive aggression: an immediate response to some provoking event that is perceived as negative, threatening, or fear-provoking. This implies a lower level of internal regulation and planning, with a greater susceptibility to the influence of outside forces.

Functions of the Behavior:

Attention: the behavior gets a response from the victim or another observer that is reinforcing due to the attention and fuss

Avoidance: escape from undesired tasks, environments, people

Sensory: sensory overload, gain access to ritualistic or repetitive behavior

Searching for tangibles: obtaining toys, food, etc…

Environmental Factors:

Psychosocial Stressors (i.e., family stress); chaotic or unpredictable environment; violence in the environment (may lead to the individual following a pattern that has been modeled for them); interruption of special interest

Contributing Mechanisms:

Cognition: difficulty empathizing with, or taking the perspective of, another individual; intellectual disability; cognitive rigidity; angry rumination and perseveration; over-sensitivity and over-reaction to other-than-expected outcomes

Communication: lack of effective communication system, difficulty communicating wants and needs, difficulty understanding the communication of others, difficulty identifying internal states

Emotion Regulation: poor emotional control (emotional over-reactivity), poor emotional identification and recognition, poor expression of emotions, higher levels of irritability

Executive Functions: poor inhibition, difficulty shifting attention/sets

Social: bullying, social rejection (and fear of social rejection), social humiliation, negative social feedback, social naivety

Higher IQ and Adaptive Behavior Skills have been found to be associated with more sophisticated forms of aggression

Lower IQ, Adaptive Behavior, and Communication Skills have been found to be associated with more physical forms of aggression

Comorbidities:

Anxiety: social anxiety, in particular, has been associated with increased aggression; the individual's ability to cope with anxiety-provoking events (and other stimuli) may be overwhelmed and they may externalize this as aggression

Atypical autonomic function: dysregulation in the autonomic nervous system with heightened sympathetic (Fight or Flight) activity.

Difficulties with sleep: difficulties can include being able to get to sleep, getting adequate sleep, as well as getting adequate quality sleep

Disruptive disorders: oppositional defiant disorder, conduct disorder, intermittent explosive disorder

Health related: physical ailments/pain (such as illness, recurrent ear infections, dental pain), epilepsy

Neuropsychiatric disorders such as depression, bipolar disorder, and schizophrenia may increase the individual's risk of developing aggression

Prone to be hyperactive, or have a lot of pent up energy (ADHD?); attentional difficulties

Trauma: often under-recognized in individuals with ASD, trauma can lead to a sensitization of the prefrontal-limbic networks, leading to unchecked limbic output produces aggressive behavior (Im, 2016)

Factors that have not been found to contribute significantly to aggression:

Sociodemographic factors (age, gender, parental education, race, ethnicity) (Presmanes Hill, et al., 2014)

Potential Outcomes of the Behavior: (Fitzpatrick, Srivorakiat, Wink, Pedapati, & Erickson, 2016)

For the individual: limited social relationships, placement in restrictive educational or residential setting; use of physical interventions; increased risk of being victimized; use of psychotropic medications; decreased quality of life; decreased educational, vocational, residential opportunities; physical injury; increased trauma

For school and therapeutic staff: provider stress and burnout, increased bias and fear related to the individual; entrenchment in attitudes and feelings of isolation and separation from supports; decreased expectations for the individual; physical injury; decreased emotional boundaries

For family and caregivers: increased stress and burnout; physical injury; financial problems; entrenchment in attitudes and feelings of isolation and separation from supports; lack of support services (including respite care, therapeutic care, case management, and personal care assistance); physical injury; decreased quality of family life and well-being

Interventions for Select Functions/Causes of Aggression in Individuals with ASD

Prevention (Ory, 2007):

- Protect the individual from uncertainty/negative emotions (particularly those that have developed as a response to past incidents of the aggressive behavior)
- Communicate certainty of expectations (vague or insecure expectations may lead to testing and/or threatening behaviors)
- Develop predetermined responses to any testing behaviors
- Set the person up to succeed (try to provide the individual with a reason to want to be where he or she is)
- Arrange to have regularly scheduled positive experiences (Never take regularly scheduled positive things away. The positive scheduled activity is not a reward for positive behavior, but rather it is a predictable and positive life structure.)
- Identify earliest behavioral signs in the chain of behaviors leading to the aggression and develop a predetermined plan to address these signs

Crisis (Ory, 2007):

- Develop a predetermined, coordinated plan for working with (and protecting those working with) the individual who is aggressive
- Make sure all that are working with the individual are aware of (and following) the crisis management plan designed to bring the crisis to a close
- Be prepared with a back-up plan (and adjust the back-up plan as new contingencies and/or factors are determined by the team working with the individual)
- Maintain safe physical and psychological boundaries (be prepared to remain calm)
- If the aggression is directed toward a particular person, it is advisable to remove the target of the aggression (this person can be reintroduced later once the individual becomes more regulated)
- Provide a safe, secure place for the individual to go to in the event of a crisis

Responses to Proactive Aggression:

- Address any underlying mental health factors that may influence the person exhibiting proactive aggression (oppositional defiant disorder, conduct disorder, bipolar disorder, intermittent explosive disorder
- Prepare a plan for when the person becomes aggressive
- Avoid providing energy to the individual who is displaying aggressive behavior—at times, the response that is given to the aggressive behavior may be of such a nature that it can be reinforcing to the individual
- Energize success: Experiential Recognition, Proactive Recognition, and Creative Recognition
- Utilize clear limits and expectations that are known to all that are working with the individual: make sure limits and expectations are clear and concise
- Determine which limits/expectations/ rules are absolute (Plan A), which we can engage in Collaborative Problem Solving around (Plan B), and which we will just drop (Plan C)
- Allow the individual to experience the consequences of limit, expectation, and rule violations

Environmental Factors:

- Designing and setting up space to reduce clutter/chaos
- Use of visual cues/ visual supports
- Psychosocial stressors

Communication:

- Functional Communication Training
- Picture Exchange Communication Training
- Awareness, and communication, of internal states
- Development of expressive and receptive language skills: there are a number of curricula out there that address these skills. This ABA curriculum has skills at multiple levels and uses evidence-based practices in its approaches: 1-4 years old, 3-5 years old, 4-7 years old, and 7 years-Young Adult

Health Related Factors: have the health related factor addressed by the appropriate health care professional

Pharmacological Interventions:

- The following medications have been found to have some efficacy in addressing aggressive behaviors in some individuals with ASD:
  - Atypical anti-psychotics (AAP): particularly risperidone and aripiprazole
  - Typical anti-psychotics: haloperidol
  - SSRI's: sertraline
- Pharmacological interventions can create significant side effects for some individuals with ASD, including: AAPs—weight gain, increased appetite, drowsiness, dizziness; haloperidol—adverse neuromotor effects, tardive dyskinesia; sertraline—increased energy, impulsivity, decreased concentration, insomnia

Antecedent Strategies: ; Singh, Lancioni, Winton, & Singh, 2011

- Video self-modeling of adaptive, coping responses
- Social stories related to adaptive behaviors
- Non-contingent reinforcement: delivering a reinforcement on a fixed or variable schedule, independent of the target behaviors.
- Contingent contracting: an agreement between the individual and parent, teacher, or therapist, that specifies the behaviors that will be consequence

Instructional Strategies for Lagging Skills that May Influence the Expression of Aggression:

- Self-control
- Impulse-control
- Anger management
  - Elementary
  - Teens
- Consequences of behavior
- Empathy
- Flexibility
- Addressing Panic, Stress, and Anxiety influences

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